5

10

15

ADAPTIVE RECEIVER SYSTEM THAT ADJUSTS TO THE LEVEL OF INTERFERING SIGNALS

ABSTRACT OF THE INVENTION

Adaptive receiver system that adjusts to the level of interfering signals. An adaptive system is provided for use with a radio receiver to adapt to interfering signals associated with a received RF signal. The radio receiver includes a LNA to receive the RF signal and produce an amplified signal that is coupled to a down-converting mixer that produces a mixer output. A peak detector is coupled to receive the mixer output to produce a peak signal. An integrator is coupled to the peak detector to receive the peak signal and produce an integrated signal and a mixer is coupled to receive the integrated signal and a transmit power indicator to produce a current control signal that is coupled to the LNA. The current control signal is used to control a bias current of the LNA, so that cross modulation associated with the received RF signal is reduced